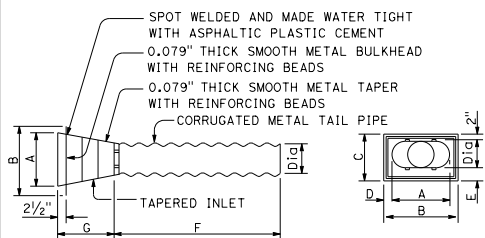


PLAN END VIEW

Bulkhead and taper of same thickness as tail pipe with 0.079" maximum. Tail pipe of same thickness as downrain pipe.

### ENTRANCE TAPER - TYPE 1 ALTERNATIVE A



PLAN END VIEW

Tail pipe of same thickness as downrain pipe.

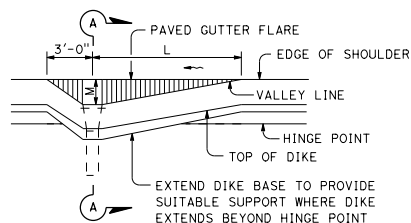
### ENTRANCE TAPER - TYPE 1 ALTERNATIVE B

CMP dimensions as tabulated below

P	10"	15"	18"	21"	27"
Q	8"	12"	15"	18"	24"

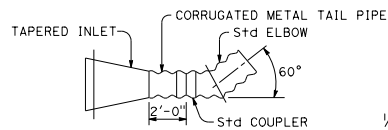
Slip joint to be same thickness as downrain pipe.

Dia	Min L	M	N
8"	10'-0"	1'-6"	8"
12"	15'-0"	1'-8"	1'-0"
15"	25'-0"	2'-0"	1'-3"
18"	30'-0"	2'-6"	1'-4"
24"	40'-0"	3'-0"	1'-6"



PLAN

### MOUNTABLE DIKE TYPE 1



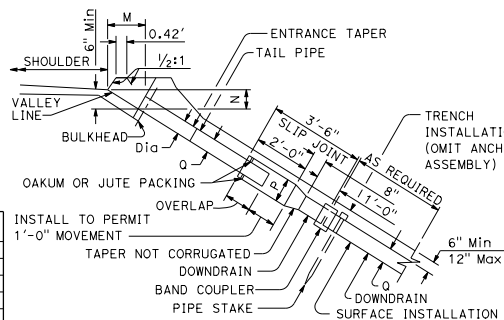
Tapered inlet of same construction and dimensions as Type 1 - Alternative A or B except tail pipe length will be 2'-0".

### ENTRANCE TAPER - TYPE 2

Taper joints may be welded or riveted. Dimensions to be as tabulated below for Type 1 Alternatives A and B.

Dia	A	B	C	D	E	F	G
8"	1'-4"	2'-1 1/2"	1'-3"	4 3/4"	5"	6'-0"	2'-0"
12"	1'-6"	2'-1 1/2"	1'-7"	3 3/4"	5"	6'-0"	2'-0"
15"	1'-9"	2'-6"	1'-11"	4 1/2"	6"	6'-0"	2'-0"
18"	2'-0"	2'-10"	2'-3"	5"	7"	6'-0"	2'-0"
24"	2'-10"	3'-10"	2'-11"	6"	9"	4'-0"	4'-0"

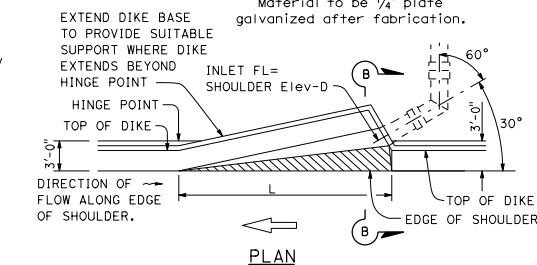
### ENTRANCE TAPER - TYPE 1 ALTERNATIVE A AND B



SECTION A-A TYPE 1

### NOTES:

1. Cable, slip joint or anchor assembly to be used when specified.
2. Slip joint to be omitted when completely buried.
3. Slip joint for Type 1 entrance taper shown, Type 2 similar.

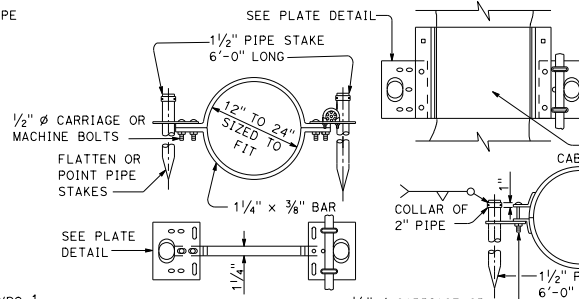


PLAN

### MOUNTABLE DIKE TYPE 2

(For use on full freeway sections ONLY with grades of 2% or greater)

### ENTRANCE TAPER AND PIPE DOWNRAIN



### ALTERNATIVE A CORRUGATED METAL PIPE DOWNRAIN ANCHOR ASSEMBLY

Cable and cable clamps to be used when required by the Special Provisions.

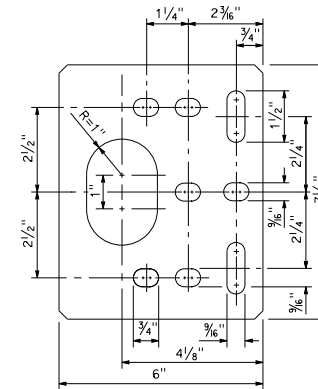


PLATE DETAIL

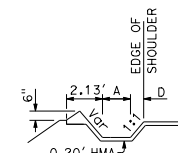
Material to be 1/4" plate galvanized after fabrication.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS
REGISTERED CIVIL ENGINEER May 31, 2018 PLANS APPROVAL DATE THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.				
Bruce D. Swanger No. C61257 Exp. 6-30-19 CIVIL STATE OF CALIFORNIA				

- 12" ANNULAR COUPLING BAND
- HELICAL COUPLING BAND
- TWO PIECE INTEGRAL FLANGE DIE FORMED BAND FOR HELICAL CORRUGATED STEEL PIPE
- FLATTEN OR POINT PIPE STAKES

### NOTES:

1. Either Alternative A or Alternative B anchor assemblies and pipe stakes may be used at Contractor's option for corrugated steel pipe or corrugated aluminum pipe. Alternative A anchor assembly only to be placed in annular corrugation. Alternative A anchor assembly may be placed on annular coupling band if securely fastened on downstream side of joint. Alternative B anchor assembly to be fastened to pipe sections and not to a band coupler used to join sections.
2. For cable anchorage system details, see Standard Plan D87C.



SECTION B-B

Dia D	Min L
8"	15'
12"	20'
15"	30'
18"	35'
24"	45'

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

### CORRUGATED METAL PIPE DOWNRAIN DETAILS

NO SCALE

D87A